

- Make sure that air handling unit filters are changed every 2 - 3 months, and that coils on the outdoor condensing unit and indoor heating and cooling units are kept clean.
- Check control sequencing for multiple chillers and boilers. For light load operation, use the smallest and most efficient chiller or boiler available and avoid frequent equipment cycling.
- Check the duct work for air leaks about once a year if you have a forced-air heating system. To do this, feel around the duct joints for escaping air when the fan is on. Small leaks can be repaired with duct tape. Larger leaks may require caulking.

Long-term Conservation Measures

- Perform energy audits on all buildings.
- Incorporate energy efficiency guidelines for all new construction.
- Incorporate energy efficiency guidelines for all building retrofits.
- Purchase only "Energy Star" equipment and appliances.
- Utilize performance contracting to limit economic impact on building retrofits.
- Retrofit most energy inefficient buildings first.
- Replace T-12 bulbs with T-8 bulbs.
- Replace all magnetic ballasts in fluorescent light fixtures with electronic ballasts.
- Where possible, replace all manual switches with automatic occupancy sensors.
- Replace inefficient windows, install window films and insulate buildings.
- Water conservation including low flow faucets, low flow toilets and an evaluation of hand drying methods should be evaluated in the same contexts as electricity.
- Develop landscaping plans that do not require the large amounts of water consumption.
- Install variable speed drives on air handlers.
- A central heating and cooling system will use less energy than individual heat-cool units for most work environments.
- Utilize high efficiency motors on electrical equipment.
- Evaluate state processes to eliminate or reduce energy resources needed for the process such as eliminating or reducing the forms needed to get permission for an activity, simplify approval chains or modify reporting requirements, etc.

Conservation Plan Points of Consideration

- Optimizing energy conservation and energy management supports enhanced environmental stewardship by Big Horn County Commissioners and staff in promoting energy efficiency, reduction thereof in utility costs, and most importantly, cost avoidance regarding budgetary requests in management and operations of Big Horn County facilities and buildings.
- The efficient and conscientious use of energy by Big Horn County employees is essential to modeling good citizenship, accountability and service.
- Big Horn County government has a responsibility to be a leader in workplace resource efficiency.
- The combustion of fossil fuels - through electricity generation and heating plants - results in carbon dioxide emissions. Increased concentrations of carbon dioxide in the atmosphere contribute to the greenhouse effect and global climate change, both locally and nationally. A reduction in energy consumption by Big Horn County employees will assist in promoting the reduction of greenhouse gas emissions attributable to Big Horn County facility operations.
- As energy costs continue to increase, energy conservation measures provide cost avoidance and cost savings back to Big Horn County budgets.
- To effectively address energy conservation by a county government entity, both operational efficiency aspects and employee usage patterns must be evaluated and considered.
- An energy plan is the single most important part of an effective energy program.
- Without a plan, County staff can only react to a given situation. An energy plan allows County individuals to be proactive in management of County facilities and resources.
- Recognize the energy demand and environmental impact associated with the County's operation and management of facilities necessary to provide services to Big Horn County staff and county residents.
- Establish efficient energy management within County government operations as a fundamental operational objective, with special emphasis on assuring all County staff are educated in conservation measures, as well in adherence of plan.
- Implement, where practicable, energy efficiency measures through a variety of mechanisms such as life cycle analysis and energy performance contracting.
- Support and promote verification and commissioning of fundamental building systems to ensure they are designed, constructed, installed, calibrated, and operating as intended, in order to achieve exemplary energy performance goals;
- Directionally advocate for adherence of voluntary green construction and remodeling standards for buildings where appropriate, such as ENERGY STAR, and encourage various nationally supported and resource efficient standards, such as the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED), for building excellence when appropriate and/or life cycle cost effective.
- Encourage the tracking, promotion, of sustainable and energy efficient practices;

- Encourage the adoption of environmentally preferable purchasing policies for products, and service, and suggest that contractors and suppliers commit to similar energy efficiency and sustainability standards.
- Encourage the expansion of renewable energy use and other distributed generation technologies throughout the County's facilities and activities.
- Provide County personnel with proper training and education in implementing this policy, as well serve as an educational and informational resource in energy efficient practices within the workplace and foster a sense of personal responsibility.
- Recognize and award individual and collective efforts that contribute to the County's energy resource conservation policy goals achieved at the employee level and or by Departments.
- Support continuous energy performance improvements by funding new efficiency measures with funds derived from utility savings.

Implementation

This ECP is supported by guidelines and procedures that institute and promote measurable energy reduction goals. These guidelines and procedures through policy are a structured approach to realize and achieve these goals through a combination of energy conservation upgrades, enhanced operational efficiencies and employee behavioral modification changes and/or actions. It allows for a considerable reduction in overall energy consumption without the use of capital funding. The ECP and its content is not a static document and may be modified in the future to reflect emerging “best management practices” in energy conservation and energy management strategies and initiatives.

The policy and guidelines initiative also supports objectives that result in healthier buildings and enhanced worker comfort, both of which can contribute to greater workplace productivity.

Reducing energy consumption in Big Horn County buildings shall include, but is not limited to, guidelines set forth in the Big Horn County ECP. Energy control devices that incorporate artificial intelligence shall become an extensive part of this program ensuring that manual adjustments to control settings are not required on a regular basis.

All facilities shall be evaluated periodically and energy use will be reviewed to determine which buildings may become candidates for future energy projects. Implementation of projects shall be determined according to costs, availability of funds and estimated return on investment. This goal is to reduce our energy consumption by 15% by the year 2015. Emphasis on energy conservation must continue to assure initiatives and goals will be achieved. Present and future rate increases have made it essential to be creative and resourceful to reduce energy consumption.

Energy Conservation Coordination, Management and Engagement

Big Horn County will develop use the ECP to help educate and encourage Big Horn County staff, directors and administrators to reduce energy consumption and promote “ownership” of energy costs by individual departments and/or facilities. Electricity used by common office equipment (including computers, monitors, copy machines, computer network equipment, telephone network equipment, printers and fax machines) makes up a significant share of the electricity used in commercial buildings. Power monitoring is a common technique that decreases the amount of power consumed when the equipment is not in use. Other efficiency features such as double-sided printing can save money and reduce the environmental costs of producing the paper.

Big Horn County will implement communication initiatives to raise awareness of possible energy efficiencies in the workplace, upon adoption of ECP. These communication efforts could include:

- Issuing e-mails highlighting the need for staff, directors and administrators to play a role in reducing energy usage at work through simple housekeeping measures such as turning off computer monitors and lights at the end of the day.
- Staff participation campaigns to encourage the implementation of energy-saving practices.
- Placement of environmental and energy reduction strategies, plans and commitments on the Big Horn County website.

Big Horn County will ensure that all appropriate personnel involved in resource conservation and operations within Big Horn County facilities will receive training for implementation of the ECP. Additionally, the aforementioned energy committee participants will work towards the common goal of achieving the following energy resource needs for Big Horn County staff:

- Relevant training or training materials for those programs that they deem appropriate in relating to the energy management and application strategies contained in the policy and energy plan.
- Every new employee that works in County facilities or with energy equipment is encouraged to be given basic instruction on the introduction to energy management, the whole building approach, lighting, HVAC, energy management systems and controls, efficient water use, and efficiency standards for other natural energy resources.
- Encourage incorporation into existing procurement courses, or develop for new courses, information on energy management tools, including energy savings performance contracts, utility energy efficiency service contracts, ENERGY STAR and other energy efficient products, water and other natural resources, and life cycle cost analysis.